



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/614,056      | 07/08/2003  | Takeshi Ando         | Q76455              | 7511             |

23373 7590 11/24/2006  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

|          |
|----------|
| EXAMINER |
|----------|

HUYNH, CHUCK

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2617

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/614,056 | <b>Applicant(s)</b><br>ANDO, TAKESHI |  |
|                              | <b>Examiner</b><br>Chuck Huynh       | <b>Art Unit</b><br>2617              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-12 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,2,4-12 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2617

### **DETAILED ACTION**

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 1-2, 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toy et al. (hereinafter Toy; US 6192115) in view of Koster (US 6259914) further in view of Kung et al. (US 6373817; hereinafter Kung).**

Regarding claim 1, Toy discloses a notification system for notifying information about a mobile station capable of using international roaming service (Abstract; Col 2, lines 9-10), comprising:

an information storing unit (databases Fig.1 , nos. 22,23) that stores information about a mobile station which belongs to a first network in a first country, said information including a fact whether said mobile station is moved to a second country and registered as a visitor station in said second country or not (Col 1, lines 41-53; Col 2, lines 1-26; Col 3, lines 51-52));

a notification unit (Col 3, lines 53-58) that refers to said information storing unit when said mobile station is called by a caller terminal within said first network to detect whether said mobile station is registered as said visitor station in said second country or not, and notifies said caller terminal of the registration of said mobile station before a connection between said caller terminal<sup>15</sup> and said mobile station is established, when said mobile station is registered as said visitor station in said second country (Col 2, lines 16-26).

a location obtaining unit that obtains location of said mobile station (Col 2, lines 16-26);

a visitor registration unit that registers said mobile station as a visitor station in said second country to have said mobile station capable of establishing a connection via a second network in said second country when said mobile station moves to said second country and requests for the registration (Col 2, lines 16-26);

a reporting unit that reports said registration of said mobile station to said location obtaining unit, wherein said location obtaining unit stores information about said registration of said mobile station in said information storing unit (Col 2, lines 16-26; Col 5, lines 37-40); and

Art Unit: 2617

a retaining unit that temporary retains establishing a connection between said caller terminal and said mobile station (holding for information before making/completing the call Col. 2, lines 1-6; 43-47).

Toy discloses all the particulars of the claim, but was unclear on the international roaming aspect (Col 2, lines1-15).

However, Koster does disclose international roaming services (Abstract) and an HLR and a VLR to conduct registration.

It would have been obvious to one ordinarily skilled in the art at the time of invention to combine Toy's disclosure with Koster to provide international (country to country) registration information for caller of called party to establish calling charges, for improved billing accuracy.

Toy in view of Koster discloses all the particulars of the claim except for a mode changing unit that changes mode of a connection between said caller terminal and said mobile station from a conversation mode to a text-based mail sending mode upon receiving a request from said caller terminal.

However, Kung does disclose a mode changing unit that changes mode of a connection between said caller terminal and said mobile station from a conversation mode to a text-based mail sending mode upon receiving a request from said caller terminal (Col 10, lines 57-63).

Art Unit: 2617

It would have been obvious to one ordinarily skilled in the art at the time of invention to be able to send text-base messages instead of talking to the called party if parties are not simultaneously available.

Regarding claim 2, Toy discloses a notification system as set forth in Claim 1, further comprising a calculating unit that calculates telephone fee charged to said caller terminal when said connection between said caller terminal and said mobile station registered as said visitor station in said second country is established, wherein said notification unit notifies said caller terminal of the telephone fee calculated by said accounting unit in addition to said registration before said connection between said caller terminal and said mobile station is established, when said mobile station 10 is registered as a visitor station in said second country (Abstract; Col 1, lines 41-53; Col 2, lines 1-15).

Regarding claim 4, Toy discloses a notification system as set forth in claim 2 further comprising:

a location obtaining unit that obtains location of said mobile station (Col 2, lines 16-26);

a visitor registration unit that registers said mobile station as a visitor station in said second country to have said mobile station capable of establishing a connection via

Art Unit: 2617

a second network in said second country when said mobile station moves to said second country and requests for the registration (Col 2, lines 16-26); and

a reporting unit that reports said registration of said mobile station to said location obtaining unit, wherein said location obtaining unit stores information about said registration of said mobile station in said information storing unit (Col 2, lines 16-26; Col 5, lines 37-40).

Regarding claim 5, Toy discloses a notification system as set forth in claim 3, wherein said visitor registration unit deletes said registration of said mobile station as said visitor station upon receiving request from said mobile station, said reporting unit reports said deletion of said registration of said mobile station to said location obtaining unit, and said location obtaining unit deletes said information about said registration information in said information storing unit (Col 2, lines 16-38).

Regarding claim 6, Toy discloses a notification system as set forth in claim 4, wherein said visitor registration unit deletes said registration of said mobile station as said visitor station upon receiving request from said mobile station, said reporting unit reports said deletion of said registration of said mobile station to said location obtaining unit, and said location obtaining unit deletes said information about said registration information in said information storing unit (Col 2, lines 16-38).

Regarding claim 7, Toy discloses a notification system as set forth in claim 1, further comprising an accounting unit that charges paid caller terminal for notification of said notification unit (Col 2, lines 56-59).

Regarding claim 8, Toy discloses a notification system as set forth in Claim 2, further comprising an accounting unit that charges said caller terminal for notification of said notification unit (Col 2, lines 56-59).

**3. Claim 9, 10, are rejected under 35 U.S.C. 103(a) as being unpatentable over Toy in view of Koster further in view of Kung in further view of Dunn.**

Regarding claim 9, Toy in view of Koster in further view of Kung discloses all the particulars of the claim except for a notification system as set forth in claim 1, further comprising a time calculation unit that calculates local time of said second country, wherein said notification unit notifies said caller terminal of said local time in addition to said registration, when said mobile station is registered as a visitor station in said second country.

However, Dunn does disclose a notification system as set forth in claim 1, further comprising a time calculation unit that calculates local time of said second country, wherein said notification unit notifies said caller terminal of said local time in addition to said registration, when said mobile station is registered as a visitor station in said second country (Abstract; Col 2, lines 18-30; Col 3, lines 43-45, 49-51).



Art Unit: 2617

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Dunn's feature with Toy to provide users with more information options, so that caller may exercise better judgment and be better informed of called party circumstances.

Regarding claim 10, Toy in view of Koster in further view of Kung discloses all the particulars of the claim except for a notification system as set forth in claim 2, further comprising a time calculation unit that calculates local time of said second country, wherein said notification unit notifies said caller terminal of said local time in addition to said registration, when said mobile station is registered as a visitor station in said second country.

However, Dunn does disclose a notification system as set forth in claim 1, further comprising a time calculation unit that calculates local time of said second country, wherein said notification unit notifies said caller terminal of said local time in addition to said registration, when said mobile station is registered as a visitor station in said second country (Abstract; Col 2, lines 18-30; Col 3, lines 43-45, 49-51).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Dunn's feature to provide users with more information options, so that caller may exercise better judgment and be better informed of called party circumstances.

Art Unit: 2617

**4. Claim 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toy in view of Koster further in view of Kung in further view of Asano et al. (hereinafter Asano).**

Regarding claim 11, Toy in view of Koster in further view of Kung discloses all the particulars of the claim except a notification system as set forth in claim 1, further comprising a translation unit that aids translation of conversations between users of said caller terminal and said mobile station.

However, Asano does disclose a notification system as set forth in claim 1, further comprising a translation unit that aids translation of conversations between users of said caller terminal and said mobile station (Col 5, lines 64-67; Col 6, lines 1-13).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate a translation unit to facilitate communication between different language users.

Regarding claim 12, Toy in view of Koster in further view of Kung discloses all the particulars of the claim except a notification system as set forth in claim 2, further comprising a translation unit that aids translation of conversations between users of said caller terminal and said mobile station.

However, Asano et al. (hereinafter Asano) does disclose a notification system as set forth in claim 1, further comprising a translation unit that aids translation of conversations between users of said caller terminal and said mobile station (Col 5, lines 64-67; Col 6, lines 1-13).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate a translation unit to facilitate communication between different language users.

**5. Claim 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koster in view of Frey et al. (US 6535596; hereinafter Frey) further in view of Kung et al. (US 6373817; hereinafter Kung).**

Regarding claim 17, Koster discloses a notification system for notifying information about a mobile station capable of using an international roaming service, comprising:

an information storing unit that stores information about a mobile station which belongs to a first network in a first country, said information including a fact whether said mobile station is moved to a second country and registered as a visitor station in said second country or not (Abstract);

a visitor registration unit for registering said mobile station as a visitor station in said second country so as to have said mobile station be capable of establishing a connection via a second network in said second country when said mobile station moves to said second country and requests the registration, the visitor registration unit being part of the second network in the second country (Abstract);

a reporting unit for reporting said visitor registration of said mobile station to said location obtaining unit, the location obtaining unit storing information about said visitor registration in said information storing unit (Fig. 1; Col 4, lines 48-65);

Koster discloses all the particulars of the claim except for

a notification unit for referring to said information storing unit to detect, when said mobile station is called by a caller terminal within said first country, whether the mobile station is registered as a visitor station in the second country, and, if the mobile station is registered as a visitor in the second country, for notifying said caller terminal of the registration of said mobile station before a connection between said caller terminal and said mobile station is established; and

a retaining unit for temporarily retaining establishing a connection between said caller terminal and said mobile station upon instruction from said caller terminal before the connection between said caller terminal and said mobile station is established at least until the user of said caller terminal selects one of a at least one subsequent operation at least including restarting establishing the connection between said caller terminal and said mobile station and terminating establishing the connection between said caller terminal and said mobile station.

However, Frey does disclose

a notification unit for referring to said information storing unit to detect, when said mobile station is called by a caller terminal within said first country, whether the mobile station is registered as a visitor station in the second country, and, if the mobile station is registered as a visitor in the second country, for notifying said caller terminal of the

Art Unit: 2617

registration of said mobile station before a connection between said caller terminal and said mobile station is established (Col 8, lines 18-25; Col 6, 60-65); and

a retaining unit for temporally retaining establishing a connection between said caller terminal and said mobile station upon instruction from said caller terminal before the connection between said caller terminal and said mobile station is established at least until the user of said caller terminal selects one of the subsequent operation at least including restarting establishing the connection between said caller terminal and said mobile station and terminating establishing the connection between said caller terminal and said mobile station (Fig. 4; Col 7, line 59 – Col 8, line 42).

It would have been obvious to one ordinarily skilled in the art at the time of invention to combine Frey's disclosure to delegate charges correctly and to improve billing methodology, for improved billing accuracy.

Koster in view of Frey discloses all the particulars of the claim except for a mode changing unit that changes mode of a connection between said caller terminal and said mobile station from a conversation mode (communication when the called party is present) to a text-based mail sending mode upon receiving a request from said caller terminal.

However, Kung does disclose a mode changing unit that changes mode of a connection between said caller terminal and said mobile station from a conversation mode (communication when the called party is present) to a text-based mail sending mode upon receiving a request from said caller terminal (Col 10, lines 57-63).

It would have been obvious to one ordinarily skilled in the art at the time of invention to be able to send text-base messages instead of talking to the called party if parties are not simultaneously available.

Regarding claim 18, Frey discloses the notification system as set forth in Claim 17, further comprising a mode changing unit that changes mode of a connection between said caller terminal and said mobile station from a conversation mode to a mail sending mode (to voicemail number) upon receiving a request from said caller terminal, wherein said subsequent operations further including changing the mode of the connection between said caller terminal and said mobile station from the conversation mode to the mail sending mode, and when the user of said caller terminal selects said changing the mode of the connection from the conversation mode to the mail sending mode, said mode changing unit changes the mode of the connection between said caller terminal and said mobile station from the conversation mode to the mail sending mode (Col 9, lines 37-40).

Claims 18 further claims another said subsequent operation of claim 17, which states that only one selection of the subsequent operations are required for the system. Therefore, the subsequent operation claimed in 18 is not necessary to reject the claimed system.

Claim 20 is similarly rejected, as it claims another subsequent operation of claim 17, which only one subsequent operation is required by the system and was rejected in claim 17, rendering claim 20 inapplicable.

Regarding claims 19, Frey already disclosed in claim 17 that it is only necessary to select one of the subsequent operation; therefore, a subsequent operation of terminating establishing the connection between said caller terminal and said mobile station was disclosed by Frey (Fig. 4; Col 7, line 59 – Col 8, line 42), rendering claim 19 to be inapplicable.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Adamany; Robert Andrew discloses Methods and systems for providing information to a home system regarding a wireless unit roaming in a visited system

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Huynh whose telephone number is 571-272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chuck Huynh

  
**DUC M. NGUYEN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**